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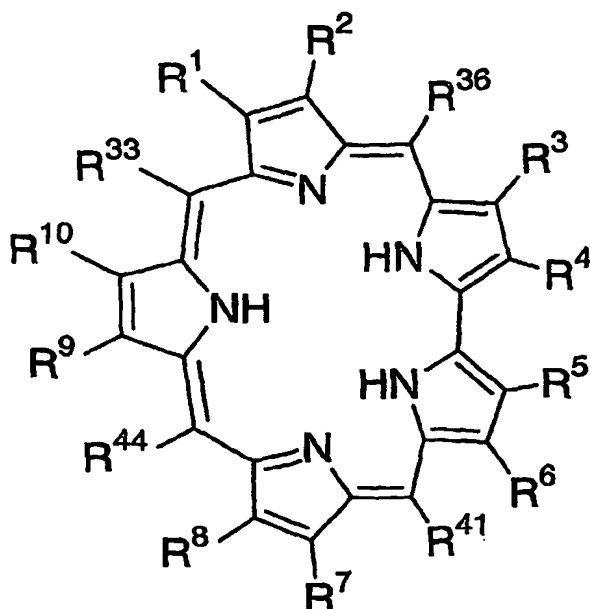
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[Continued on next page]

(54) Title: **SAPPHYRINS AND USES THEREOF**

(57) Abstract: The present  
invention relates to compounds of  
Formula (I): their pharmaceutical  
composition and their utility in  
treating neoplasm.



(I)



GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

**Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

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11 August 2005

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For two-letter codes and other abbreviations, refer to the "Guid-  
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06 OCT 2005

10/552696

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10481

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/055, A61B 10/00, C07B 47/00, A61K 31/555, A61K 31/40, C07D 245/00, C07D47/00  
US CL : 540/472, 540/145, 424/9.362, 424/9.61, 540/145, 534/15, 514/185, 514/410

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 540/472, 540/145, 424/9.362, 424/9.61, 540/145, 534/15, 514/185, 514/410

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
STN, EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Shevchuk et al. Synthesis of Sapphyrins via a '3+1+1' Procedure. Tetrahedron Letters 42(2001) pp. 2447-2450. See entire document. and for pharmaceutical carrier see footnote on p. 2448 where the corresponding sapphyrins 6-9 were washed and with NaHCO <sub>3</sub> and water.	1, 11

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;"

document member of the same patent family

Date of the actual completion of the international search

11 March 2005 (11.03.2005)

Date of mailing of the international search report

29 JUN 2005

Name and mailing address of the ISA/US

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10481

### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 8 and 12  
because they relate to subject matter not required to be searched by this Authority, namely:  
Please See Continuation Sheet
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such  
an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all  
searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite  
payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report  
covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is  
restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐  
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/10481

Box II Observations where certain claims were found unsearchable I. because they relate to subject matter not required to be searched by this Authority, namely:  
Formula I of claim 8 was flawed and not clearly discernable. The search was attempted using Formula I as found in the other claims. The text of claim 12 is not discernable and the the missing text will be search by considering the missing text as "a pharmaceutical composition."